## REMARKS

Claim 1 has been amended to recite the limitations of claims 2 and 5. Accordingly claims 2 and 5 have been canceled.

Claim 6 has been amended to depend from claim 1.

Claims 3, 4 and 16-19 are canceled.

Applicants turn to the substance of the Action, in which rejections have been advanced against the pending claims under one or the other of 35 U.S.C. §§ 112, 102 and 103.

**Rejection under 35 U.S.C. § 112**

Claim 1-4 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement. Although Applicants do not agree, solely in order to expedite prosecution of the present application, claim 1 has been amended to include the limitations of claims 2 and 5. Claim 1 now recites that the low application temperature thermoplastic hot melt adhesive comprises from about 0.5 to about 55 wt % of a thermoplastic elastomer, from about 30 to about 90 wt % of a tackifying resin, from 0 to about 40 wt % of a diluent and from 0 to about 25 wt % of a wax, and the adhesive has a viscosity at 275°F of less than about 8,000 cP, a yield stress of less than about than 80 psi and a creep performance for a bond made through strand coating of less than about 25%. Applicant submits that the forgoing amendment obviates the Examiner's Section 112 rejection. Reconsideration and withdrawal are then requested.

**Rejection based on vanDrongelen**

Claims 1, 6-7, 11-15 and 20 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over vanDrongelen et al. (U.S. Patent 6,103,814, hereinafter "vanDrongelen").

As an initial matter, and prior to addressing the merits, applicants wish to note that the applicants filed an appeal brief, and instead of allowing this application to be reviewed at the Board of Patent Appeals and Interferences, the Office chose to reopen prosecution and issue this non final rejection with the same rejection as set forth in the earlier record.

According to Office Actions dated January 11, 2008 (paragraph 4), the Examiner cites vanDrongelen as showing hot melt adhesives containing a thermoplastic elastomer and that can have a viscosity and creep value falling within the scope of the claim. The Examiner refers to Table 21 (see col. 45) and to col. 55, lines 21-57 of vanDrongelen as disclosing viscosity and creep performance falling within the scope of the claims. However, VanDrongelen fails to disclose any formulation that can be applied at low temperatures (an adhesive that is applied at a temperature of between about 200°F and 300°F) or has a viscosity at 275°F of less than about 8,000 cP.

While vanDrongelen reports viscosity data for a few of the many samples tested at 140°C (284°F), see reported data in Table 21, of below 8000cps, the same samples tested at 120°C (248°F) are substantially higher (3 or more times higher). Based on the reported data, one skilled in the art would not be able to identify a single sample that would have a viscosity at 275°F (135°C) of less than 8000 cps as required of applicants' claimed adhesive. Moreover, there is no disclosure that the tested sample may be used/applied at low application temperature (i.e., a temperature of between about 200°F and 300°F). The disclosure at col. 55, lines 21-57, of vanDrongelen discloses method of determining creep performance (measured as elastic retention/percent of original length) for a bond made through spiral coating. The adhesive of vanDrongelen is applied at a temperature of 160°C (320°F) through a nozzle heated to 160°C (320°F), i.e., the adhesive of vanDrongelen is not a low application temperature hot melt

adhesive (an adhesive that can be applied at a temperature of between about 200°F and 300°F, see applicants' disclosure (substitute specification) at page 3, lines 13-14).

For a prior art document to anticipate, all elements of the claim must be disclosed within the four corners of the document. The vanDrongelen patent does not disclose any formulation that can be applied at low temperatures (at a temperature of between about 200°F and 300°F) or that has a viscosity at 275°F of less than about 8,000 cP, let alone a formulation that also has a yield stress of less that 80 PSI and has a creep performance for a bond made through strand coating of less than about 15%. As such, applicants' claimed adhesive is not anticipated by vanDrongelen.

Claims 1-6, 11-16 and 20 are not anticipated by vanDrongelen.

There is no disclosure in the vanDrongelen patent that would motivate the skilled artisan to formulate adhesives which comprises from about 0.5 to about 55 wt % of a thermoplastic elastomer, from about 30 to about 90 wt % of a tackifying resin, from 0 to about 40 wt % of a diluent and from 0 to about 25 wt % of a wax, and the resultant adhesive would have a low viscosity (a viscosity at 275°F of less than about 8,000 cP) that can be used (i.e., applied) at low temperatures, let alone expect that such adhesive would have a yield stress of less than about than 80 psi and a creep performance for a bond made through strand coating of less than about 25%. The claimed invention is not obvious over vanDrongelen.

The examiner's position that the vanDrongelen's adhesive is reported to have a viscosity of less that 8000cps at 285°F does not mean it will have a viscosity greater than 8000cps at 275°F is without merit, as is the assertion that there is no application temperature claimed. One skilled in the art would recognize that if a hot melt adhesive has a viscosity of e.g., 7,320cP at 285°F, the same adhesive would have a viscosity greater than 8000cP at a lower temperature of 275°F. In

fact, the exponential increase of viscosity is demonstrated in Table 21: the adhesive formulations having viscosities of 7,450; 6,930; 7,320; 9,620 and 6,850 cps at 285°F have a viscosities of 48,400; 25,350; 24,200; 38,750; and 22,000, respectively, at 250°F. Regarding the examiner's assertion that there is no application temperature claimed, the claims recite "low application temperature" which is defined within the subject application as being an adhesive that is applied at a temperature of between about 200°F and 300°F.

The vanDrongelen patent fails to teach or suggest any adhesive having a viscosity at 275°F of less than about 8,000 cP, which makes it suitable for application at low temperatures. As the formulations of vanDrongelen do not even have the required viscosity, it would not be reasonably to presume, as urged by the examiner, that the adhesive of vanDrongelen would possess the characteristics claimed by applicants.

Claims 1, 6-7, 11-15 and 20 are not obvious over vanDrongelen.

Withdrawal of the examiner's Section 102 or, in the alternative, 103 rejection of claims 1, 6-7, 11-15 and 20 is requested.

**Rejection based on vanDrongelen in view of Tomita**

Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over vanDrongelen in view of Tomita et al. (US 200210061966, hereinafter "Tomita"). It is the Examiner's position that Tomita's hot melt adhesive contains thermoplastic elastomers, which is similar to those disclosed in vanDrongelen. While the Examiner acknowledges that vanDrongelen is silent as to the incorporation of this resin, the Examiner notes that Tomita incorporates ionomer resin in paragraph [0023]. The Examiner urges that while ionomer is not exemplified, a skilled artisan would be motivated to select the ionomer resin and incorporate it into the composition of vanDrongelen, given the art recognized advantages.

Applicants disagree.

The arguments set forth above regarding vanDrongelen are equally applicable here.

Tomita is a hot melt composition directed to a sealant for use in the field of housing such as interior and exterior panels, joints, attachment part to window sashes to exterior wall panels, wall socket, and etc. [0026]. Unlike the instant adhesive, Tomita's adhesive is not directed to an elastic attachment adhesive that can be stretched without breakage (page 3, lines 17-20). As such, a skilled artisan would not look to develop a low application temperature hot melt adhesive directed to elastic attachments.

Moreover, a skilled artisan would not look to Tomita's high viscosity adhesive to apply at low temperature. As exemplified in Table 1 of Tomita, the melt viscosity for Examples 1-4 have a viscosity range of 100-500 Pas at 250C, which corresponds to 100,000-500,000cP at 392F. Hence, Tomita's adhesive would have far greater viscosity values than the reported values at 275F. In addition, nothing in Tomita would suggest to a skilled artisan that an addition of an ionomer would result in an adhesive with the yields stress less than 30 psi and the creep performance for a bond made through strand coating less than about 25%.

The Examiner urges that a skilled artisan would be motivated to select the ionomer resin of Tomita into the composition of vanDrogelen "...given the art recognized advantages" (Office Action dated November 15, 2009, paragraph 8). However, Tomita merely mentions ionomer among many styrene block copolymers having a number average molecular weight of less than 100,000. Tomita is completely silent as the "recognized advantages" of addition of an ionomer. Even if a requisite motivation to combine the teachings of vanDrongelen with Tomita is determined, the combination would not result in the instant low application temperature hot melt

adhesive. The combined adhesive would still result in high viscosity adhesive, and as such would not be appliable at low temperature such as 275F.

Claims 8-10 are not obvious over vanDrongelen in view of Tomita.

Withdrawal of the examiner's Section 103 rejection of claims 8-10 is requested.

**Conclusion**

Applicants believe that the foregoing constitutes a complete and full response to the Office Action. Accordingly, an early and favorable reconsideration of the rejections and an allowance of all of pending claims are earnestly solicited.

Respectfully submitted,
/Sun Hee Lehmann/
Sun Hee Lehmann
Reg. No. 58,338

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Henkel Corporation
10 Finderne Avenue
Bridgewater, NJ 08807
Telephone: (908) 575-6869